

## CLAIMS

What is claimed is:

- 1                   1.       A peptide according to formula 1  
2       (formula 1)  $(X1)_n\text{-A-A-V-A-L-L-P-A-V-L-L-A-L-L-A-P-(X2)}_m$   
3       wherein X1 and X2 are selected from one or more charged amino acid residues  
4       such that each X1 and each X2 may be the same or different charged amino acid  
5       residue, further wherein n has a value of 0 or 3-10, and m has a value of 0 or 3-10.
- 1                   2.       The peptide according to claim 1, wherein either  $m=0$  or  
2        $n=0$ , wherein if  $m = 0$ , n has a value from 4 to 10, and if  $n = 0$ , m has a value  
3       from 4 to 10.
- 1                   3.       A peptide according to formula 2  
2       (formula 2)  $(X1)_n\text{-P-A-V-L-L-A-L-L-A-(X2)}_m$   
3       wherein X1 and X2 are selected from one or more charged amino acid residues  
4       such that each X1 and each X2 may be the same or different charged amino acid  
5       residue, further wherein n has a value of 0 or 3-10 and m has a value of 0 or 3-10.
- 1                   4.       The peptide according to claim 3, wherein either  $m=0$  or  
2        $n=0$ .
- 1                   5.       A pharmaceutical composition, comprising an antiviral  
2       peptide and a pharmaceutically acceptable carrier, wherein the pharmaceutical  
3       composition is effective for treating or preventing viral infections in a mammalian  
4       host.
- 1                   6.       The pharmaceutical composition according to claim 5,  
2       wherein the antiviral peptide further comprises a solubility tag.

1                   7.     The pharmaceutical composition according to claim 5,  
2     wherein the antiviral peptide is selected from the group consisting of SEQ ID NOS:  
3     1-15, SEQ ID NOS 18-30, fragments thereof and derivatives thereof, wherein if the  
4     antiviral peptide is SEQ ID NO:14, SEQ ID NO:15, a fragment or derivative  
5     thereof, then X1 and X2 are selected from one or more charged amino acid residues  
6     such that each X1 and each X2 may be the same or different charged amino acid  
7     residue, further wherein n has a value of 0 or 3-10, and m has a value of 0 or 3-10.

1                   8.     The pharmaceutical composition according to claim 7,  
2     wherein the antiviral peptide is selected from the group consisting of SEQ ID  
3     NOS: 1-13.

1                   9.     The pharmaceutical composition according to claim 7,  
2     wherein the antiviral peptide is selected from the group consisting of SEQ ID  
3     NOS: 14-15.

1                   10.    The pharmaceutical composition according to claim 7,  
2     wherein the antiviral peptide is SEQ ID NO:14, wherein m=0 and n has a value  
3     of 4 to 10.

1                   11.    The pharmaceutical composition according to claim 5,  
2     wherein the composition is effective at treating or preventing infections from  
3     enveloped viruses.

1                   12.    The pharmaceutical composition according to claim 11,  
2     wherein the composition is effective at treating or preventing infections from one or  
3     more viruses selected from the group consisting of human immunodeficiency virus,  
4     herpes simplex viruses and cytomegalovirus.

1                   13.    The pharmaceutical composition according to claim 12,  
2     wherein the composition is effective at treating or preventing infections from one or  
3     more herpes simplex viruses.

1                   14.    The pharmaceutical composition according to claim 5,  
2    wherein the composition is effective at treating or preventing infections from  
3    nonenveloped viruses.

1                   15.    A method of treating or preventing a virus infection in a  
2    warm blooded animal comprising administering to the animal an effective amount of  
3    the pharmaceutical composition according to claim 5.

1                   16.    A method of treating or preventing a virus infection in a  
2    warm blooded animal comprising administering to the animal an effective amount of  
3    the pharmaceutical composition according to claim 10.